

16.3400

32491
S/044/61/000/011/010/049
C111/C444

AUTHOR: Serov, M. I.

TITLE: The asymptotic behavior of the spectrum of a linear differential operator with periodic coefficients

PERIODICAL: Referativnyy zhurnal, Matematika, no. 11, 1961, 21-22
abstract 11B104 (Uch. zap. Yelabuzhsk gos. ped. in-sta
1960, 8, 24-71)

TEXT: In §1 the results of the preceding paper (Ref. 11B103) of the author, concerning the position of the spectrum of the equation

$$y'' + p(x)y' - [q(x) - \lambda]y = 0, \quad (1)$$

are improved; $p(x)$ and $q(x)$ are piecewise continuous complex periodic functions with the period 1; both functions have a bounded variation on $(0, 1)$. Let y_1, y_2 be the solution with the initial conditions

$$y_1(0, \lambda) = 1, y_1'(0, \lambda) = 0, y_2(0, \lambda) = 0, y_2'(0, \lambda) = 1 \text{ and}$$

$$\varphi(\lambda) = \frac{1}{2}[y_1(1, \lambda) + y_2(1, \lambda)] \exp \left[\frac{1}{2} \int_0^1 p(x) dx \right].$$

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The asymptotic behaviour of the

From the definition of the spectrum (Ref. 11B'05) it follows that the spectrum is the set of the points of the λ -plane which is obtained from the equation:

$$\varphi(\lambda) = \cos \left[t - \frac{i}{2} \int_0^1 p(x) dx \right],$$

if t passes through the interval $(0, 2)$

All equations (1) with the same invariant

$$I(x) = q(x) - \frac{p(x)^2}{4} - \frac{p'(x)}{2}$$

and the same number $c = \frac{i}{2} \int_0^1 \operatorname{Re} p(x) dx$ have the same spectrum

In §2 one obtains the asymptotic formula

$$\varphi(\lambda) = \cos k - \frac{\sin k}{k^2} b_k - \frac{\cos k}{k^2} (a_k^2 - b_k^2) + O(k^{-3})$$

where

$$k = \sqrt{-\lambda}, \quad a_k = \int_0^1 I(x) \cos 2kx dx, \quad b_k = \int_0^1 I(x) \sin 2kx dx$$

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The asymptotic behaviour of the

$$B_k = \int_0^1 \sin 2kx \, dx \int_0^1 I(t) I(t-x) dt$$

Basing on this formula it is shown in §3 that the spectrum of (1) for $r \neq 0$ contains a single unbounded component, asymptotically confluent with the parabola

$$\lambda = x^2/r^2 + x^2/4 \quad \text{where } \lambda = \mu + 1/4$$

Besides of this component the spectrum consists of a finite number of closed curves which are homeomorphic to the circle. The curves can "stick together" in some points. For $r = 0$ the spectrum consists of curves each of which is homeomorphic to an interval. An investigation of the asymptotic behaviour of the zeros ω_n of $\gamma(\lambda)$ leads to the

statement: In order the spectrum of (1) to consist of one single unbounded component, it is necessary and sufficient that all points

$\omega_n = \gamma(\lambda_n)$ lie inside of the ellipse

$$\omega = \cos \left[t + \frac{1}{2} \int_0^1 p(x) \, dx \right] \quad (2)$$

The latter is certainly the case for sufficiently large r . If r
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S/044/61/000/011/010/049

C111/C444

The asymptotic behaviour of the

becomes smaller. the ellipse (2) narrows and at the passing of the ellipse through the point ω_n the number of spectrum components is increased by m_n , m_n being the multiplicity of the root ω_n of the equation $\varphi(\omega) = 0$. Mentioned is a hypothesis which is connected with the further investigation of the spectrum of $\varphi(\omega)$ especially with the investigation of spectrum components for $r = 0$.

(Abstracter's note: Complete translation.)

Card 4/4

1. SEROV, M. V.
2. USSR (600)
4. Lumbering
7. Several problems of mechanization in loading operations. Les. prom. 12 no. 10, '52.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

SEROV, M.V., veterinarnyy vrach

Viral abortion in sheep; a survey of foreign literature.
Veterinariia 37 no.10:73-82 O '60. (MIRA 15:4)
(Abortion in animals) (Sheep--Diseases and pests)

SEROV, N.A., inzh.; RUBLEV, V.Ya., inzh.

Treating instruments with molybdenum disulfide. Der. prom.
14 no.7:27 J1 '65. (MIRA 19:1)

SEROV, N.A.; YERYAGINA, V.A.

Experimental stability testing of conical cooling towers.
Nauch.dokl.vys.shkoly; stroi. no.1:153-158 '59.
(MIRA 12:10)

1. Rekomendovana kafedroy stroitel'noy mekhaniki Leningradskogo
inzhenerno-stroitel'nogo instituta.
(Cooling-towers--Testing)

SEROV, N.A., kand.tekhn.nauk

Calculating statically indeterminate girders with a fixed minimum weight. Nauch.dokl.vys.shkoly; stroi. no.1:79-87 ' 58.
(MIRA 12:1)

1. Rekomendovana kafedroy stroitel'noy ~~mekhaniki~~ Leningradskogo inzhenerno-stroitel'nogo instituta.
(Girders)

S/124/63/000/003/060/065
D234/D308

AUTHOR: Serov, N. A.

TITLE: Design of statically indeterminable trusses by securing minimum weight for several load combinations acting at different times or for a moving load

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1963, 52, abstract 3V369 (Sb. nauchn. tr. Leningr. inzh.-stroit. in-t, 1959, no. 30, 26-40)

TEXT: A continuation of the author's earlier paper (Nauchn. tr. Leningr. inzh.-stroit. in-ta, 1956, no. 23, 67-83). The author assumes (without proof) that the best solution securing minimum weight is the structure of equal strength. Two versions of design are proposed for finding it, the first being based on repeated design of interminable truss by the method of forces, with successive improvement of given rod sections (the author calls this version 'the section area method'). The second version is based on repeated design with given forces. The author points out that it is less

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Design of statically ...

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D234/D308

difficult and has better convergence of approximations. An example is given in which the solution is found for a singly indeterminable truss, subject to two independent loads. / Abstracter's note: Complete translation. /

Card 2/2

TO: DIRECTOR, CIA
FROM: SAC, NEW YORK (100-100000) (P)
SUBJECT: [REDACTED] (U)
RE: [REDACTED] (U)

100-100000 (U)

L 02455-07 FIVE/ENTRE II

ACC NR: AP6004226

(A)

SOURCE CODE: UR/0331/65/000/011/0015/0018

AUTHOR: Serov, N. A.

ORG: Kirov Woodworking Combine (Kirovskiy derevoobrabatyvayushchiy kombinat)

TITLE: Improvements in saw mill technology

SOURCE: Lesnaya promyshlennost', no. 11, 1965, 16-18

TOPIC TAGS: woodworking machinery, forest product

ABSTRACT: Technological improvements made at the Kirov Woodworking Combine since 1960 are described. These improvements refer to chiefly log transport, log sorting, and bark removal. A detailed description of production processes and equipment at the combine is given in block diagrams and sketches. The economic effect of the modernization program has been to increase output from 839,000 m³ of sawed lumber (1961) to 1,599,000 m³ (1964). Down time has decreased from 21.9% to 10.5%. Orig. art. has: 3 figures.

SUB CODE: 13/ SUBM DATE: none

UDC: 674.093:658

Cord 1/1 *gl*

SEROV, N.I.

High-level automation. Bum. prom. 38 no.10:15-16 0 '63.

(MIRA 16:11)

1. Nachal'nik tsekha kontrol'no-izmeritel'nykh priborov i
avtomatiki Kotlasskogo sul'fitno-tsellyuloznogo kombinata.

SEROV, N.M.

Reducing time needed for technological preparation of the
manufacture of new articles. Priborostroenie no.5:21 My '63.
(MIRA 16:8)

SEROV, N. P.

25489 SEROV, N. P. Materialy k biologii soma Aral'skogo basseyna. Doklady Akad. nauk uz SSR, No. 4, 1948, S 28-32. - Rezyumena uzbek. Yaz.

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1948

SEROV, N.P.

Fish of the Nura Reservoir. Izv. AN Kazakh. SSR. Ser. zool. no. 9:
87-95 '50. (MLRA 9:5)

(Nura Reservoir--Fishes)

SEROV, N.P.

Fishes and fisheries of the Kurgal'dzhino lakes in Akmolinsk Pro-
vinces. Trudy Inst.zool.AN Kazakh.SSR 2:105-111 '53. (MLBA 10:2)
(Kurgal'dzhino District--Fishes)

SEROV, N.P.

~~Reference: Serov, N.P.~~

Material on the systematics and biology of the Turkestan catfish
(*Glyptosternum reticulatum* McClelland). Izv. AN Kaz. SSR no.125:
62-64 '53. (MLR 6:12)

(Turkestan--Catfishes) (Catfishes--Turkestan)

GORYUNOVA, A.I., kandidat biologicheskikh nauk; SEROV, N.P., kandidat biologicheskikh nauk.

Acclimatization of fish in Kazakhstan. Trudy sov.Ikht.kom. no.3:
109-113 '54. (MLRA 7:8)

1. Institut zoologii Akademii Nauk Kazakhskoy SSR.
(Kazakhstan--Fishes) (Fishes--Kazakhstan)

SEROV, N., kandidat biologicheskikh nauk

Significant date in the life of Professor Aleksandr Vasil'evich
Afanas'ev. Vest. AN Kazakh SSR 11 no. 10: 108-109 0'55.
(Afanas'ev, Aleksandr Vasil'evich, 1905-) (MIRA 9:1)

SEROV, N.P.

Measures for improving the quality of carp in Lake Balkhash.
Sbor.rab.po ikht. i gidrobiol. no.1:14-18 '56.

(Balkhash, Lake--Carp)

(MLRA 10:4)

SEROV, N.P.

Fishes of Lake Chelkar. Sbor. rab. po ikht. i gidrobiol. no.1:278-
320 '56. (MLRA 10:4)

(Chelkar, Lake--Fishes)

SEROV, N.P.

Occurrence of the crucian carp in the Kara-Tal River. Izv. AN Kazakh.
SSR, Ser. biol. no.2:87-88 '57. (MIRA 11:3)
(Kara-Tal River--Carp)

SEROV, N.P.

Eastern bream in the basin of Lake Balkhash. Sbor.rab. po ikht. i
gidrobiol. no.2:80-86 '59. (MIRA 12:11)
(Balkhash region--Bream)

SEROV, N.P.

Fishes of the Kamysh-Samarskiye and Jushum Lakes. Sbor.rab. po ikht.
i gidrobiol. no.2:152-175 '59. (MIRA 12:11)
(Kushum Valley--Fishes)
(Kamysh-Sararskiye Lakes--Fishes)

SEROV, N.P.

Material on the biology, systematics and commercial importance of
crucian carp from some bodies of water of Kazakhstan. Sbor.rab. po
ikht. i gidrobiol. no.2:380-394 '59. (MIRA 12:11)
(Kazakhstan--Carp)

BOK, I.I.; BARBOT de MARNI, A.V.; VISLOGUZOVA, A.V.; GALIYEV, M.S.;
LI, A.B.; LOMONOVICH, M.I.; YAKOVENKO, Z.V.; ASSING, I.I.;
NURMANGALIYEV, A.B.; SOKOLOV, S.I.; GRIGOR'YEVA, Ye.P.;
SEROV, N.P.; LEONOV, G.M.; ZAKHAROV, B.S.; ZAGAYNOV, V.I.;
BOROVSKIY, V.M.; LITVINOVA, A.A.; POGREBINSKIY, M.A.;
NASONOVA, O.M.; KHAYDAROV, R.M.; SUVOROVA, R.I., red.;
ALFEROVA, P.F., tekhn. red.

[Ili Valley, its nature and resources] Iliiskaia dolina, ee
priroda i resursy. Pod obshchei red. M.I.Lomonovicha. Alma-
Ata, Izd-vo AN Kaz.SSR, 1963. 338 p. (MIRA 16:8)

1. Akademiya nauk Kazakhskey SSR, Alma-Ata. Institut geologicheskikh nauk. 2. Nauchnyye sotrudniki Instituta geologicheskikh nauk AN KazSSR (for Bok, Barbot de Marni, Visloguzova, Galiyev, Li, Lomonovich, Yakovenko). 3. Institut pochvovedeniya AN KazSSR (for Assing, Nurmangaliyev, Sokolov, Borovskiy, Litvinova, Pogrebinskiy). 4. Institut botaniki AN KazSSR (for Grigor'yeva, Nasonova). 5. Institut zoologii AN KazSSR (for Serov). 6. Kazakhskiy politekhnicheskoy institut (for Leonov). 7. Ministerstvo sel'skogo khozyaystva KazSSR (for Zakharov). 8. Kazanskiy filial Instituta "Gidroyekt" im. S.Ya.Zhuka (for Khaydarov).

(Ili Valley--Physical geography)

SEROV, N.V.; SHIROKOV, A.V., veterinarnyy vrach

How we prevented the spreading of foot-and-mouth disease.
Veterinariia 40 no.3:26 Mr '63. (MIRA 17:1)

1. Veterinarnyy otdel Kostromskogo oblastnogo upravleniya proizvodstva i zagotovok sel'skokhozyaystvennykh produktov.
2. Nachal'nik veterinarnogo otdela Kostromskogo oblastnogo upravleniya proizvodstva i zagotovok sel'skokhozyaystvennykh produktov (for Serov).

SEROV, Nikolay Vasil'yevich; SHLYCHKOVA, A.I., red.; SUBBOTINA, G.M.,
tekh.n.red.

[Beekeeping] Pchelovodstvo. Novosibirsk, Novosibirskoe
knizhnoe izd-vo, 1959. 131 p. (MIRA 14:2)
(Bee culture)

SEROV, N. Ie.

Formation of races in fishes acclimatized in the basin of Lake
Balkhash. Vop. ekol. 5:195-197 '62. (MIRA 16:6)

1. Otdeleniye Instituta ikhtiologii rybnogo khozyaystva AN
Kazakhskoy SSR, Balkhash.
(Balkhash, Lake--Fishes) (Zoology--Variation)

L 27246-66 EWT(d) IJP(c)

ACC NR: AP6009882

SOURCE CODE: UR/0413/66/000/004/0072/0073

AUTHOR: Serov, O. Ya.

12
B

ORG: none

16
TITLE: Method for plotting multifocus curves with the focal property of a constant sum of distances. Class 42, No. 178998

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 72-73

TOPIC TAGS: curve plotting, curve geometry

ABSTRACT: This Author Certificate presents a method for plotting multifocus curves with the focal property of a constant sum of distances, e.g., $r_1 + r_2 = C$. Bearings representing the foci are placed on the plane of the drawing at the positions of the foci of the given curve. The focal property of the curve is copied by spacing (drawing) a practically inextensible flexible element, e.g., a wire thread, of length C fastened at the ends from the bearings to a writing device. The curve is plotted by moving the writing device with the thread tight. To plot multifocus curves with the focal property $\sum_{i=1}^n p_i r_i = C$ with an arbitrary distribution of foci and

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UDC: 744.345.62

L 27246-66

ACC NR: AP6009882

arbitrary positive rational coefficients p_i , the thread spacing is produced by multiple passages around the bearings and writing device corresponding to integral ratios of multiples of the coefficients p_i . Fastening of the thread ends is made at the writing device, bearings, or at both depending on the ratio of coefficients p_i . To simplify the plotting process for curves whose smallest ratio of multiples of the coefficients p_i contains more than two odd numbers, from the next bearing (excluding the last), if the particular thread spacing ends on it, the thread passes to the following bearing for its farther distance.

SUB CODE:12, 14/SUBM DATE: 20Aug62

Card 2/2 *CC*

SEROV, P.S.

The use of an all-metal saw-tooth flat. Tekst.prom.15 no.9:37-39
S '55. (MIRA 8:11)

1. Master fabriki "Shuyskiy proletariy"
(Carding machines)

L 21858-66 EWT(m)/ETC(m)-6/T/EWP(w) EM/WW/DJ
 ACC NR: AP6002594 (A, N) SOURCE CODE: UR/0286/65/000/023/0089/0090

AUTHORS: Gulyayev, V. I.; Peyros, V. F.; Serov, R. N.

ORG: none

TITLE: Bench for testing ²⁶impeller motors. Class 65, No. 176812

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 89-90

TOPIC TAGS: water turbine, engine test stand

ABSTRACT: This Author Certificate presents a bench for testing impeller motors. The bench includes a platform submerged in water with the motor mounted on it. The motor is driven through a mechanical transmission by an engine mounted on a base (see Fig. 1). To determine the thrust and torque generated by the motor, the platform is made with two horizontal journals. One journal has a two-armed lever whose ends interact with force gauges mounted on the base. This journal is swivel-mounted in the bearings of a slide block which interacts with two other force gauges fastened to the base and turns about the axis of a vertical journal. The vertical journal is swivel-mounted in bearings mounted in the base and is joined with the bearings of the other horizontal journal. To provide natural conditions

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UDC: 629.12.532.582.5.039:678.016

L 21858-66
ACC NR: AP6002594

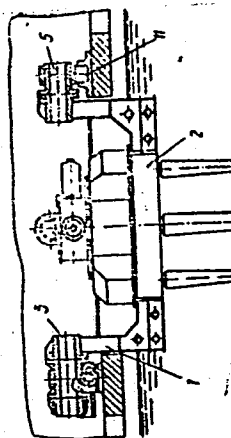
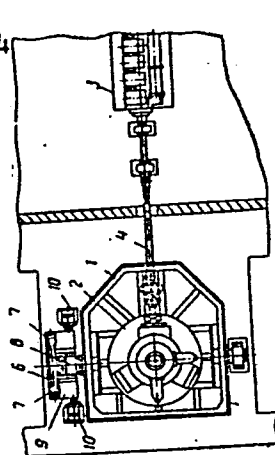


Fig. 1. 1 - platform; 2 - motor; 3 - engine; 4 - transmission; 5 - horizontal journal; 6 - two-armed lever; 7 - force gauges; 8 - bearings; 9 - slide block; 10 - force gauges; 11 - vertical journal.

of water flow to the motor, parts made in the form of the submerged portion of a boat are mounted on the bottom of the platform. To provide for testing motors of differing sizes, the mechanical transmission is made with flexible couplings. Orig. art. has: 1 diagram.

SUB CODE: 13/ SUBM DATE: 13Nov64

Card 2/2 nst

L 49159-66 INT(1)/INT(6)/INT(m /INT(k)-P/P/INT(k) INT(c) WG/AT/WH
ACC NR: AP6031338 SOURCE CODE: UR/0336/66/004/003/0103/0106
26
236

AUTHOR: Korobkin, V. V.; Serov, R. V.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences, SSSR (Fizicheskii institut Akademii nauk SSSR)

TITLE: Investigation of the magnetic field of a spark produced by focusing laser radiation

SOURCE: Zh. eksper. i teoret. fiz. Pis'ma v redaktsiyu. Prilozheniye v. 4, no. 3, 1966, 103-106

TOPIC TAGS: laser beam, spark shock wave, discharge plasma, plasma magnetic field

ABSTRACT: The authors have observed the magnetic field of the spark produced when a sufficiently powerful laser beam is focused. This field existed only during the time when the spark plasma was fed by the laser beam. A Q-switched ruby laser was used in the experiment, at a pulse power 2 J and a pulse duration 30 nsec. The magnetic field of the spark was measured with two 2-turn coils. The signals from the two coils, which were disposed in various manners relative to the spark, passed through two different delay lines (cables 20 and 50 m long), amplified by two amplifiers, and displayed on an oscilloscope. The delay-time difference was 150 nsec, so that it was possible to measure simultaneously arbitrarily chosen components of the magnetic fields at two points of space on a single oscillogram. To suppress the photoeffect from the inductive pickups, the spark was surrounded by a tube of black paper of 5 mm

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L 45159-66

ACC NR: AP6031338

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inside diameter. In addition, the signal from each pickup was fed to the input of the delay line through a special isolating transformer with a grounded primary-winding center tap to eliminate the pulse due to the photoeffect. The results of the experiments can be summarized as follows: A magnetic dipole moment exists in the spark. This moment is perpendicular to the laser-beam propagation direction. In addition, the direction of the moment depends essentially on the part of the lens through which the beam passes. Similar results are obtained also when part of the beam passing through the center of the lens is obstructed. A magnetic moment appears also when the laser beam passing through the center of the lens is allowed to pass also through a glass wedge with an apex angle 11° . The direction of the magnetic moment is determined by the rotation of the beam prior to the breakdown. If the wedge is replaced by a plane-parallel plate, no magnetic moment is produced. The magnetic moment measured in the experiments was approximately $(3-5) \times 10^{-2}$ Oe/cm². This dipole is apparently localized on the front of the shock wave moving toward the lens, for only in this region does the laser beam interact with the plasma. Supplementary experiments have shown that signals from the pickups are not the result of the crowding out of the earth's magnetic field by the plasma. The mechanism of occurrence of the magnetic dipole is not yet completely clear. It can be assumed that it is due to the turning of the shock-wave front moving towards the lens. The reasons for the turning may be distortion of the ray caustic and inhomogeneity of the angular distribution of the laser radiation. The authors thank S. L. Mandel'shtam for continuous interest and a discussion of the present work, and G. A. Askar'yan and N. K. Sukhodrev for useful dis-

Card 2/3

L 45159-66

REC NR: AP6031338

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[02]

cussions. Orig. art. has: 2 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 30May66/ ORIG REF: 005/ OTH REF: 002/ ATD PRESS:
5081

Card 3/3 *CLM*

SEROV, S.F.

Clinical hematological characteristics of goiter in some districts of
Alma-Ata Province, Kazakh.S.S.R. Izv. AN Kazakh.SSR Ser.khir.no.1:
174-181 '47. (MLRA 9:8)

1. Respublikanskaya zobnaya stantsiya Ministerstva zdravookhraneniya
KazSSR i Kafedra patologicheskoy anatomii Kazakhskogo meditsinskogo
instituta imeni V.M.Molotova.
(ALMA-ATA PROVINCE--GOITER)

SEROV, S.F., (Karaganda)

Materials on a morphological study of the nervous system in silicosis.
Ark.h.pat. 18 no.3:13-19 '56 (MIRA 11:10)

1. Iz kafedry patologicheskoy anatomii (zav. - dotsent. S.F.Serov)
Karagandinskogo meditsinskogo instituta.

(SILICOSIS, compl.

nervous sytem destruction, review (Rus))

(NERVOUS SYSTEM, dis.

caused by silicosis, review (Rus))

SEROV, S.F.

Pathological anatomy of the nervous system in various stages of
silicosis. Izv. AN Kazakh. SSR. Ser. med. i fiziol. no.1:81-94
(MIRA 12:7)

'57.

(SILICOSIS, pathology,

NS (Rus))

(NERVOUS SYSTEM, pathology,
in silicosis (Rus))

SEROV, S F

USSR / Human and Animal Morphology, (Normal and Pathological).
Cardiovascular System.

5

Abs Jour : Ref Zhur - Biol., No 21, 1958, No 97111
Author : Serov, S.F.
Inst : Karaganda Medical Institute
Title : Pathomorphology of the Cardiovascular System in Silicosis.
Orig Pub : Tr. Karagandinsk. med. in-ta, 1957, 1, No. 7, 412-414

Abstract : Pathological changes in capillaries, arterioles and venules of lungs, in small and medial arteries and veins, and changes of large vessels appearing later, were described by 78 autopsies. Gradual development of the so-called "pulmonary heart" is noted. A pathological process of the vessels of lesser circulation is accompanied by fibrous obliteration and reduction of vascular network, which alters the conditions of blood circulation in the lungs. This functional overloading of other vascular regions is accompanied by hypertrophy and hyperplasia of the vessel and myocardium elements.

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APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548130006-3"

USSR/Human and Animal Physiology - (Normal and Pathological).
Respiration.

T

Abs Jour : Ref Zhur Biol., No 4, 1959, 17523
Author : Serov, S.F.
Inst : Karaganda Medical Institute
Title : Involvement of Lymphatic System in Silicosis
Orig Pub : Tr. Karagandinsk. med. in-ta, 1957, 1, No 7, 418-420
Abstract : No abstract.

Card 1/1

SEROV, S. F.: Doc Med Sci (diss) -- "The pathological anatomy of silicosis".

Alma-Ata, 1958. 23 pp (Min Health Kazakh SSR, Kazakh State Med Inst), 300 copies

(KL, No 2, 1959, 124)

SEKOV, S.P.

[Pathological anatomy in silicosis] Patologicheskaja anatomija
silikoza. Alma-Ata, Izd-vo Akademii nauk Kazakhskoi SSR, 1958.
187 p. (MIRA 11:4)
(LUNGS--DUST DISEASES)

SEROV, S.F.

Some problems of the pathogenesis of silicosis. Trudy Inst. klin. i
eksp. khir. AN Kazakh. SSR 4:153-158 '58. (MIRA 12:4)
(LUNGS--DUST DISEASES)

SEROV, S.F.

Morphology of the compensatory-adaptive reactions in some pulmonary diseases. Trudy Inst.klin.i eksp.khir. AN Kazakh.SSR 5:35-37 '59.
(MIRA 13:5)

(LUNGS--DISEASES)

SEROV, S.F.

Pathomorphology of various stages of occupational silicosis.

Trudy Inst.klin.i eksp.khir. AN Kazakh.SSR 5:97-123 '59.

(MIRA 13:5)

(LUNGS--DUST DISEASES)

SEROV, S.F., kand.med.nauk

Histogenesis of silicotic pneumosclerosis. Vest.AN Kazakh.SSR 16
no.3:54-58 Mr '60. (MIRA 13:6)
(LUNGS--DUST DISEASES)

SEROV, S.F.

Pathological anatomy of experimental silicosis. Trudy Inst. kraev.
pat. AN Kazakh. SSR 8:32-43 '60. (MIRA 14:5)
(LUNGS—DUST DISEASES)

SEROV, S.F.

Pathomorphology of the bronchial tree and manifestations of disorders
of bronchial permeability of silicosis. Trudy Inst. kraev. pat.
AN Kazakh. SSR 8:44-49 '60. (MIRA 14:5)
(LUNGS--DUST DISEASES)

SEROV, S.F.

Precancer processes in the thyroid gland. Trudy Inst.
klin. i eksp. khir. AN Kazakh. SSR 8:88-90 '62. (MIRA 17:7)

SUKHANOV, A.A.; SIPOV, S.I.

Some indices of lipid metabolism and changes in the blood
circulation system in dogs in experimental reconstruction of
atherosclerosis without using cholesterol. Fizl. eksp. biol.
1 med. 60 no.7:34-37 31 '65. (MIRA 18:8)

L. Sverdlovskiy Institut kurortologii i fizioterapii (direktor:
S.V. Orlov).

TIMOFEYEV, V.N., kand.tekhn.nauk; VTORYKH, G.T., inzh.; SEROV, S.I., inzh.
SAVEL'YEV, V.A., inzh.

Semiautomatic production line for the manufacture of panel doors.
Der.prom. 9 no.12:17-19 D '60. (MIRA 13:12)
(Assembly-line methods) (Doors)

ORLOV, N.V.; NEVRAYEV, G.A.; ABROSIMOVA, Ye.K.; BAKHMAN, V.I.; KRYUCHKOVA,
H.P.; MALAKHOV, A.M.; OVCYANIKOVA, K.A.; SEROV, S.I.; FEDOTOV,
I.F.; SHEFER, D.G.; SHUSHAKOV, A.P.

V.V. Epshtein; obituary. Vop. kur. fizioter. i lech. fiz. kul't.
25 no. 5:478-479 S-0 '60. (MIRA 13:10)
(EPSHTEIN, VLADIMIR VASIL'EVICH, 1902-1960)

SEROV, S.I.

Characteristics of electrocardiographic changes in experimental atherosclerosis in dogs during prolonged observation. Biul. eksp. biol. i med. 50 no.7:37-42 J1 '60. (MIRA 14:5)

1. Iz eksperimental'nogo otdeleniya (rukovoditel' - kandidat meditsinskikh nauk S.I.Serov) Sverdlovskogo nauchno-issledovatel'skogo instituta kurortologii i fizioterapii (dir. - kandidat med.nauk N.V.Orlov, nauchnyy rukovoditel' - prof. D.G.Shefer). Predstavlena deystvitel'nym chlenom AMN SSSR V.N.Chernigovskim.
(ARTERIOSCLEROSIS) (ELECTROCARDIOGRAPHY)

SEROV, S.I. (Sverdlovsk)

Theoretical basis of balneology. Vop. kur., fizioter. i lech. fiz. kul't.
27 no.1:74-79 '62. (MIRA 15:5)

(CLIMATOLOGY, MEDICAL)

SERON, J. J. [unclear]

little pocket radio, Radio no. 8:29-30 Ag '65.

(MIRA 18:7)

CHEROV, V.

"Immuno-histochemical studies in the mechanism of amyloid formation."

report submitted for 2nd Intl Cong, Histochemistry & Cytochemistry, Frankfurt,
16-21 Aug 64.

Moscow.

SEROV, V., incl.

A simple pocket radio receiver. Radio no. 8:29-39 Ag '64. (MIRA 07/11)

ARTAMONOV, Ye.A., inzh.; SEROV, V.A., inzh.; SHTEYNBERG, Ya.M., inzh.

Selecting effective types of culverts for railroad lines. Vop.
tip.most.soor. no.4:128-137 '59. (MIRA 13:8)

(Culverts)

(Railroads--Construction)

BOBKOV, Vasilii Ivanovich; POCHUYEV, Yuriy Grigor'yevich; BUROV,
Georgiy Georgiyevich; BELOV, Nikolay Pavlovich; NOSOV,
Yuriy Pavlovich; SEROV, Vyacheslav Alekseyevich;
BARANOVSKIY, F.I., otv. red.; KOVAL', I.V., red. izd-vr;
IL'INSKAYA, G.M., tekhn. red.

[OMKT mechanized stoping unit] Ochistnoi mekhanizirovannyi
kompleks OMKT; rukovodstvo po ekspluatatsii i remontu. Mo-
skva, Gosgortekhnizdat, 1963. 242 p. (MIRA 16:8)
(Stoping (Mining))--Equipment and supplies)

L 36296-65 EWT(m)/EPF(c)/EWP(j)/EWA(d)/T Pc-4/Pr-4 RM
ACCESSION NR: AP4047389 S/0065/64/000/010/0037/0040

AUTHOR: Gordash, Yu. T.; Sklyar, V. T.; Serov, V. A.; Klochok, I. B.

TITLE: Petroleum desalination by use of complex pentaerythritol esters and carboxylic acids as surface-active compounds

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 10, 1964, 37-40

TOPIC TAGS: petroleum desalination, surface active compound, pentaerythritol, complex ester, esterification, carboxylic acid, hydroxyl group

ABSTRACT: The use of non-ionogenic surface-active compounds for petroleum desalination is commonly known and the authors discuss the effect of pentaerythritol on the desalination ability of complex esters of multi-atom alcohols and carboxylic acids having the length of a straight carbon chain. Esterification of pentaerythritol by a double excess of carboxylic acid yielded complex acetic, propionic, butyric and other esters. Within the 3500 to 3700 cm^{-1} range, the esters displayed a very weak absorption band which is characteristic of free hydroxyl

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226-65

ACCESSION NR: AP4047389

groups. These esters were tested as desalination agents of Ukrainian petroleum. The optimal concentration of the complex esters was found to lie within the 0.005 to 0.01% (by weight) range. Extending the carbon chain in acid to C_4 enhanced desalination but a further increase had an appreciably adverse effect. The study of the degree of substitution of free OH-groups in pentaerythritic acid showed that an increase in the number of free OH groups in complex ester impedes the desalination of petroleum. Mixtures of pentaerythritol tri- and tetraesters with butyric acid gave the best results. The findings of the authors reflect the need for the development of more effective deemulsifiers to desalinate petroleum in any Soviet deposit. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: UkrNIIgiproneft'

SUBMITTED: 00

ENCL: 00

SUB CODE: GC

NR REF SOV: 004

OTHER: 004

Card 2/2

JO

SEROV, V.I., inzh.

The TPE-10 pneumatic conveyor. Trakt.i sel'khoz mash. 32 no.9:34
S '62. (MIRA 15:12)
(Agricultural machinery) (Hay—Transportation)

SMEROV, V. I., Engineer

"Investigation of the Characteristics of Electromagnetic Railroad Brakes." Sub
28 Jun 51, Moscow Order of Lenin Power Engineering Inst imeni V.M. Molotov

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

SEROV, V.I.

Apparatus for a continuous and accurate mixing of gases. Zav.
lab. 28 no.9:1138-1139 '62. (MIRA 16:6).

1. Institut gornogo dela im. A.A. Skochinskogo.
(Gases) (Mixing machinery)

SEROV, V.I.

The SKNK-6 Combination corn planter. Trakt. i sel'khoz mash. 33 no.2:42
F '63. (MIRA 16:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennogo
mashinostroyeniya.
(Corn (Maize)) (Planters (Agriculture))

SEROV, V.I., inzh.

The SST-4 sugar beet precision planter. Trakt, i sel'khoz-
mash. 33 no.10:38-39 0 '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'sko-
khozyaystvennogo mashinostroyeniya.

SEROV, V.I., inzh.

The ZZhV-1,8 vacuum tank liquid spreader. Trakt. i sel'khoz mash.
no.8:31 Ag '64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyayst-
vennogo mashinostroyeniya.

SEROV, V.I., inzh.

The AS-2M self-loader sower. Trakt. i sel'khoz mash. no.9:25-26
S :64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyayst-
vennogo mashinostroyeniya.

SEROV, V.I.

Instrument transmitter for the measurement of pressure in model
rock faults. Trudy Inst.gor.dela 1:139-142 '54.
(Mining engineering) (Faults (Geology)) (MLRA 7:12)

5/10/77
SEROV, V.I., kandidat tekhnicheskikh nauk; SEROV, V.I., inzhener.

Automatic mine air samplers. Bezop.truda v prom. 1 no.9:29-30
S 157. (MIRA 10:9)

1. Institut gornogo dela Akademii nauk SSSR.
(Mine gases--Testing)

VI.
SINOV, S.T., G and Tech Sci -- (diss) "^{spark-proof} ^{units} Mining ~~ap-p-r-o-u-s~~ chains with
ferro-magnetic cores and ^{pulse-churn circuits} ~~distinguishing contours~~." Mos, 1959. 13 pp
(Inst of Mining, Acad Sci USSR) 150 copies (MI,37-59, 199)

S/194/61/000/008/041/092
D201/D304

AUTHORS: Kravchenko, V.S and Serov, V.I.

TITLE: A new method of spark protection in remote control and remote signalling installations

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 8, 1961, 48, abstract 8 V363 (Bezopasnost' truda v prom-sti, 1960, no. 11, 20-21)

TEXT: The new method consists in making a small current flow along the spark protecting supply line. The current produces a certain energy build-up (e.g. at a capacitor) at the motor stage. This energy is then dissipated in pulses at a given signal. The described principle makes it possible to extend the applicability of spark protecting lines to high power systems. [Abstracter's note: Complete translation] ✓

Card 1/1

S/196/62/000/010/004/035
EC73/E155

AUTHORS: Kravchenko, V.S., and Serov, V.I.

TITLE: New explosion chamber for testing electrical
circuits for safety against sparking

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.10, 1962, 16, abstract 10 A95. (Vezopasnost'
truda v prom-sti, no.11, 1961, 20-21)

TEXT: Institut gornogo dela im. A.A. Skochinskogo (Mining
Institute imeni A.A. Skochinskiy) developed an automatic
explosion chamber which permits rapid determination of the
probability of ignition of explosive gas-air mixtures during
closing and opening of electrical circuits (inductive, non-
inductive and capacitive); the circuit current which is safe
from the point of view of explosions can also be determined.
The equipment is used by a number of institutes in the gold mining
industry, and considerably speeds the development, design and
introduction of apparatus to be used in explosive atmospheres.
3 illustrations.

Card 1/1

Abstractor's note: Complete translation.]

SEROV, V.I., kand. tekhn. nauk

Sparkproof inductive networks with shunting detectors and
short-circuited turns. Nauch. soob. IGD 15:156-165 '62.
(MIRA 17:2)

PETRENKO, B.A., kand.tekhn.nauk; SEMOV, V.I., kand.tekhn.nauk

Features of igniting explosionproof media by electric discharges
in sparkproof circuits. Makh. i avtom. v gor. prom. no.3:318-331
'63. (MIRA 16:10)

SEROV, V.I., kand.tekhn.nauk

Calculation of the equivalent inductance of circuits with arc-quenching stages. Mekh. i avtom. v gor. prom. no.3:331-340 '63.
(MIRA 16:10)

29540

S/089/61/011/005/005/017

B102/B104

24.6600

AUTHORS: Serov, V. I., Pereshivkin, V. A., Andreyev, M. F.,
Aver'yanov, I. K.

TITLE: Investigation of the $\text{Be}^9(d,t)\text{Be}^8$ reaction

PERIODICAL: Atomnaya energiya, v. 11, no. 5, 1961, 440 - 442

TEXT: The authors measured the differential triton production cross section at an angle of emission of 17° and an angular distribution between 0 and 150° for $E_d = 1.125 - 3.8$ Mev. The deuterons accelerated by an electrostatic generator hit the beryllium target of $100 - 150 \mu\text{g}/\text{cm}^2$ which was placed in the center of a magnetic spectrometer with inhomogeneous field. This spectrometer analyzed the emitted tritons with energies up to $E_t = 5.4$ Mev. Faster tritons were slowed down by a foil. A thin CsI crystal with a photomultiplier served as a particle detector. A 50-channel pulse-height analyzer recorded the momentum spectrum of the particles. The differential triton production cross section as a function of E_d showed a small resonance peak at $E_d = 1.37$ Mev and a marked one at $E_d = 2.85$ Mev.
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29540
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B102/B104

Investigation of the...

Also at $E_d = 1.16$ Mev, resonance occurs as was shown by comparison with earlier measurements for $E_d = 305 - 1480$ kev. These measurements were carried out together with B. Ya. Guzhovskiy. The angular triton distribution shows good agreement with calculations based on Butler's theory for interaction radii of $4 \cdot 10^{-13}$ cm ($E_d = 1.4$ Mev) and $5 \cdot 10^{-13}$ cm ($E_d = 2.5$ and 3.5 Mev). The compound nucleus B^{11} is excited with the levels 16.77, 16.93, and 18.11 Mev. The total triton production cross section was determined from the angular distribution to 60 ± 10 mb at $E_d = 2.5$ Mev. Just as for Li^7 and B^{10} , also for Be^9 a correlation exists between the inelastic interaction thresholds and the resonance energies (in the c.m.s.) of the various reactions (E denotes the energy of the Be^9 level in Mev);

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Investigation of the...

	E_{res} , Mev	E
$Be^2(n,\alpha)He^6$	2.6	2.43
$Be^9(p,n)B^9$	2.3	
$Be^9(d,t)Be^8$	2.33	
$Be^9(\alpha,n)C^{12}$	2.75	
$Be^9(p,\gamma)B^{10}$	3.14	3.04
$Be^9(d,t)Be^8$	3.10	
$Be^9(\alpha,n)C^{12}$	3.08	

Results indicate that the configuration of the compound nucleus corresponds to the system "initial excited nucleus + incident particle". The authors thank the team of V. A. Ivanov as well as V. V. Kuzyanov for assistance. There are 5 figures, 1 table, and 6 references: 1 Soviet and 5 non-Soviet. The four most recent references to English-language publications read as follows: R. Smither, Phys. Rev., 107, 196 (1957); M. Juric, Phys. Rev., 98, 85 (1955); R. Heft, Phys. Rev., 98, 85 (1955); F. Ajzenberg-Selove, T. Lauritsen.

W. Libby, Phys. Rev., 100, 799 (1955);
Nucl. Phys., 11, No. 1, 1 (1959).

SUBMITTED: May 3, 1961

Cont 5/3

31998
S/089/62/012/001/001/019
B102/B138

24.6600

AUTHORS: Serov, V. I., Guzhovskiy, B. Ya.

TITLE: Investigation of the reactions $\text{Li}^6(t,n)$, $\text{Li}^7(t,n)$, $\text{Li}^7(\text{He}^3,n)$,
 $\text{Be}^9(t,n)\text{B}^{11}$, $\text{Be}^9(\text{He}^3,n)\text{C}^{11}$

PERIODICAL: Atomnaya energiya, v. 12, no. 1, 1962, 5 - 11

TEXT: Thin targets containing Li^6 , Li^7 and Be^9 were bombarded by He^3 ions and tritons electrostatically accelerated to 140 - 1400 kev. The yield, and the spectra of the neutrons arising in these reactions were determined. The targets were produced by vacuum sputtering LiF and Be on to Mo backings. Target thickness varied between 40 and 70 $\mu\text{g}/\text{cm}^2$ for 600 - 800 kev and 100 and 150 $\mu\text{g}/\text{cm}$ for higher energies. Bombardment was carried out with He beams containing 2 - 8% tritium, and with about 30% of He^3 . "Long counters" were used for neutron detection. Background was 10% due to scattered neutrons and 4 - 20% (depending on t-energy) due to spurious events, e. g. $\text{F}^{19}(t,n)\text{Ne}^{21}$. The necessary corrections were made

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11998
S/082/62/012/001/001/019
B102/B138

Investigation of the...

The mean total error in cross-section determination was $\pm 10\%$. The neutron spectra were examined by means of 100- μ emulsion plates for stars with recoil protons at angles of $0-15^\circ$ to the neutron track. The error in energy measurement was $\pm 5\%$. In each case 2000 tracks were evaluated, and 1000 additional tracks for $E_n \geq 3$ Mev. Results: $Li^6(t,n)$. Neutron yield was measured at 0° and $140 \leq E_t \leq 1380$ kev. When Coulomb barrier effects are taken into account, $d\sigma/d\omega = f(E_t)$ forms almost a straight line, i. e. the neutron yield is proportional to the permeability of the Coulomb barrier. The thresholds for production of slow neutrons indicate that the final He^8 nucleus is formed in the excited states 16.08, 16.66 and 16.94 Mev. The slow neutrons at $E_t = 1116$ kev are from $C^{12}(t,n)N^{14}$ reactions (N^{14} state: 4.9 Mev). The maximum at $E_n = 12$ Mev in the $E_t = 1.1$ Mev spectrum is due to a $F^{19}(t,n)Ne^{21}$ reaction. The broad maximum at $E_n = 1.5$ Mev is due to final-state interactions of reaction products. $Li^7(t,n)$ and $Li^7(He^3,n)$: Investigations at $140 - 1380$ and $410 - 1360$ kev bombarding

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S/089/62/012/001/001/019
B102/B138

Investigation of the...

energies, respectively. Apart from Be^{10} and B^{10} excited states, a Be^9 level with ≤ 10.5 Mev was discovered. From the spectra it was established that $\text{Li}^7(t,n)$ occurs chiefly by subsequent emission of two neutrons, $\text{Li}^7(\text{He}^3,n)$ and $\text{Li}^7(\text{He}^3,p)$ were of equal probability. Be^{10} and B^{10} were found to be weakly bound systems, as $\text{Li}^{7*} + \text{T}$ and $\text{Li}^{7*} + \text{He}^3$. $\text{Be}^9(t,n)\text{B}^{11}$ and $\text{Be}^9(\text{He}^3,n)\text{C}^{11}$: Bombardment energies were 230 - 1380 and 630 - 1340 kev, respectively. The yield of the first reaction was proportional to the permeability of the Coulomb barrier, the second one had a resonance which corresponded a C^{12} state of 26.8 Mev. The results are in agreement with Ref. 1. The authors thank A. I. Baz' and V. A. Zhmaylo for advice and discussion A. V. Almazov for supervision and L. A. Morkina, V. I. Zhurina, A. M. Ivanov, Ye. K. Gutnikova, L. S. Andreyeva and N. F. Nikolayeva for assistance. There are 8 figures, 1 table, and 9 references: 5 Soviet and 4 non-Soviet. The four references to English-language publications read as follows: Ref. 1: F. Ajzenberg-Selove, T. Lauritsen. Nucl. Phys. 11, 1, 1 (1959); T. Bonner, J. Butler. Phys. Rev. 83, 1091 (1951); J. Erskine, C. Browne. Bull. Amer. Phys. Soc. 2,
Card 3/4

31998
S/089/62/012/001/001/019
B102/B138

Investigation of the...

230 (1960); J. Marion, G. Weber. Phys. Rev. 103, 1408 (1956).

SUBMITTED: May 8, 1961

Card 4/4

SEROV, V. M.

Category: USSR / Diseases of Farm Animals. Diseases of Undetermined Etiology V-4

Abs Jour: Refer. Zhur-Biologiya, No 16, 1957, 72331

Author : Serov V. M., Serova N. M.

Inst : Not given

Title : The Problem of Bursitis in Northern Deer

Orig Pub: Tr. N. I. In-ta S.-Kh. Krayn. Severa, 1956, 3, 108-111

Abstract: In the Extreme North an acute disease with symptoms of bursitis in the northern deer, which was found mainly in adult animals during the spring was observed. During the summer and autumn chronic forms of the disease were observed. The clinical illness in its initial stage was manifested by damage in the bursa, most frequently found in the region of the carpal joints in the form of a spherical swelling of moderate size, which was painful, hard and hot. In chronic cases the swelling increased, the pain lessened. Sometimes orchitis, epididimitis, and mastitis were noted. The study of the blood in the sick deer with tests for brucellosis agglutination gave positive results. No bacteriological studies were done.

Card : 1/1

-5-

USSR/Pharmacology, Toxicology. Adrenergic Drugs

7-4

Abs Jour : Ref Zhur - Biol., No 5, 1958, No 23295

Author : Serov V.M.

Inst : Leningrad Veterinary Institute

Title : The Effect of Mezatone in Acute Animal Hemorrhages.

Orig Pub : Sb. rabot Leningr. vet. in-t, 1956, vyp. 18, 63-71

Abstract : Mezatone was administered intravenously in doses of 0.2-0.4 mg/kg (once or twice) of a 1% solution to cats and dogs 15-30 minutes after blood-letting; this increased the blood pressure and saved the lives of 83-5% non-anesthetized animals, and 85.7% of anesthetized animals. As with mezatone, additional subcutaneous administration of atropine sulphate in 0.5-1 mg/kg doses facilitated the arrest of acute hemorrhages.

Card : 1/1

SEROV, V.N., kandidat tekhnicheskikh nauk.

Determining the strength of cohesion of milled peat particles
deposited on surfaces. Torf. prom. 34 no.3:36-37 '57. (MLRA 10:5)
(Peat) (Dust)

SEROV, Vasiliy Nikolayevich; EL'TERMAN, V.M., kand. tekhn.nauk, retsenzent;
KUCHERUK, V.V., kand. tekhn. nauk, red.; BARYKOVA, G.I., red. izd-va;
SMIRNOVA, G.V., tekhn. red.

[Dust prevention in grinding] Obespylivanie pri rabote na abrazivnykh
stankakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,
1961. 68 p. (MIRA 14:9)

(Grinding machines—Safety measures)

SEROV, V.N.

Ovarian cysts. Sov. med. 25 no.7:114-118 J1 '61. (MIRA 15:1)

1. Iz Instituta akusherstva i ginekologii Ministerstva zdravookhraneniya
RSFSR (dir. - prof. O.V. Makeyeva).
(OVARIES---TUMORS)

SEROV, V.N.

Cysts of the corpus luteum. Akush. i gin. no.2:125-127'63.
(MIRA 16:10)

1. Iz Nauchno-issledovatel'skogo instituta akusherstva i
ginekologii (dir. - prof. O.V. Makeyeva) Ministerstva zdra-
vookhraneniya RSFSR.
(CORPUS LUTEUM —DISEASES) (CYSTS)

SEITOV, V.N. (at. Vyz'ma Kalininskoy zheleznoy dorogi)

Some results of the work of a railroad hospital. Vrach.delo
no.2:175-177 P '59. (MIRA 12:6)

(RAILROADS--EMPLOYEES--MEDICAL CARE)

SOV/137 58 11 22205

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 53 (USSR)

AUTHORS: Serov, V. N., Panin, K. P.

TITLE: Purification of Gases From Aluminum Cells (Ochistka gazov, otkhodyashchikh ot elektroliznykh vann alyuminiyevogo proizvodstva)

PERIODICAL: Tr. Gos. n. i. in-ta po promyshl. i san. ochistke gazov, 1957, Nr 1, pp 140-150

ABSTRACT: The results of tests of experimental equipment at an aluminum plant for the purpose of choosing a method of purifying gases and recovering cryolite from used solutions are presented. A 5% aqueous sodium carbonate solution is used as absorbent. 4 types of equipment are tested. Their designs are presented. The method of determining the dust and resin fluoride compounds content of the gases is elucidated. The results of the tests and the scrubber flowsheets are communicated.
A. K.

Card 1/1

SEROV, V. N.

chem Abs 748
1-25-54

metallurgy +
metallurgy

① Chem

✓ The flue gases from Martens furnaces and selection of methods of removal of dust from these gases. V. N. Serov. *Gigiena i Sanit.* 1953, No. 7, 44-5. -- The dust carried by the flue gases contains Fe_2O_3 55-65, Al_2O_3 4.7-13, SiO_2 1.6-2.1, CaO 0.8-2.0, MgO up to 0.9, and Mn up to 2%. Of the various wet and dry methods for removal of dust from such a gas stream none was found to be dependable enough for practical use.
G. M. Kosolapoff

VAMINA, L.V., doktor med.nauk; SEROV, V.N., kand.med.nauk; ZAKHARCHENKO, N.N.;
ROZENFEL'D, L.I.; SOSHKINA, N.I.

Outcome of pregnancy and labor in heart defects; based on
data of the maternity home at the 67th Moscow Clinical
Hospital. Sov.med. 28 no.11:54-60 N '65.

(MIRA 18:12)

1. Kafedra akusherstva i ginekologii (zav. - prof. K.N.
Zhmakin) I Moskovskogo ordena lenina meditsinskogo instituta
imeni I.M.Sechenova i 67-ya Gorodskaya klinicheskaya bol'nitsa
(glavnyy vrach P.S.Petrushko), Moskva.

SEROV, V.N., kand. med. nauk; SOSHIKIN, N.I.

later following resection and prosthetic substitution of the
aorta for coarctation. Akush. i gin. no.1:143-144 '65.

(MIRA 18:10)

1. Kafedra akusherstva i ginekologii (zav.- prof. K.N. Zhmakin)
i Moskovskogo ordena Lenina meditsinskogo instituta imeni
Sechenova i roditel'nyy dom pri Gorodskoy klinicheskoy bol'nitse
No.67 (glavnyy vrach P.S. Petrushko), Moskva.

L 34057-66 EWT(m)/T IJP(c) DS

ACC NR: AP6025523

SOURCE CODE: UR/0069/66/028/002/0275/0277

AUTHOR: Serov, V. N.

39
B

ORG: Scientific Research Institute of Industrial and Sanitary Purification of Gases, Moscow (Nauchno-issledovatel'skiy institut promyshlennoy i sanitarnoy oohistki gazov)

TITLE: Dynamic instrument for determining the force of adhesion of dust particles settling on the surface of filters, cyclones, precipitation chambers and electro-filter electrodes

SOURCE: Kolloidnyy zhurnal, v. 28, no. 2, 1966, 275-277

TOPIC TAGS: acceleration force, adhesion, electric instrument, measuring apparatus

ABSTRACT: Gases are purified from dust in different ways, for example, with the aid of sleeve filters, cyclones, precipitation chambers, etc. Dust settles on the filtering surface and on the precipitation electrodes of an electric filter. Dust trapping devices free gas of dust to the extent of 98.5 - 99.7%, and the untrapped highly dispersed dust is expelled into the atmosphere. The value of the adhesive force is characterized by the following function: $G + T = R_0 s$, where G = weight of dust layer (in grams); T = force required for separation (in grams); R_0 = force of adhesion (in grams); s = surface (grams/cm²). Usually, separation of dust from a surface is brought about by inertia. A method and a dynamic instrument are proposed for deter-

Card 1/2

UDC: 541.183.21

0916

0906

L 34057-66

ACC NR: AP6025523

mining forces of adhesion and particle acceleration of dust when removed from filter surfaces. Data on forces of adhesion and acceleration in the parting of a dust layer from the surfaces of filtering devices makes it possible to devise a rational method of regenerating filtering devices. -

Orig. art. has: 1 figure and 9 formulas. [JPRS: 35,998]

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Magnesian portland cement. I. L. Lefand and V. V. Serov. *Tsment* 3, No. 7, 7 18(1933); cf. I. L. Lefand and V. V. Serov. *Ibid.* 2, No. 1, 5-21(1934).—Lab. and plant investigations demonstrated the possibility of obtaining const.-vol. magnesian portland cement. The presence of free MgO (5-6%) in the clinker in quantities leading to inconstancy of vol. can be disclosed by the accelerated method of investigation in an autoclave during 3 hrs. under a pressure of 14 atm. The usual method does not give the required results on account of the slow hydration of free MgO. The excess over 5% of MgO occurs as $4\text{CaO} \cdot 2\text{MgO} \cdot \text{Al}_2\text{O}_3 \cdot \text{Fe}_2\text{O}_3$, $\text{MgO} \cdot \text{Al}_2\text{O}_3$, $2\text{CaO} \cdot \text{Fe}_2\text{O}_3$, MgO and $\text{CaO} \cdot \text{MgO} \cdot \text{SiO}_2$ and as MgO in a solid soln. in these compds.; thus is assured constancy of vol. of the cement up to a content of 11% of MgO. The clinker can be burned in rotary kilns. The optimal conditions are 25-30% of volatile matter in the charge and a moderate calorific value of the fuel. The output and fuel consumption are equal to those in the usual portland cement production. The setting time of the cement with a 2% addn. of gypsum is normal; with 30% of hydraulic additions it does not decrease in the first period of setting as in ordinary portland cement.

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